

**REMARKS**

Applicants respectfully request the Examiner to reconsider the present application in view of the foregoing supplemental amendments to the claims and the following remarks.

***Status of the Claims***

In the present Supplemental Amendment, claims 7-9 have been added. Thus, claims 1-4 and 6-9 are pending in the present application.

No new matter has been added with the addition of claims 7-9. Claim 7 is similar to claim 1 and it further indicates that the cytokine is stem cell factor (see page 44, lines 19-25 of the specification) and that CD45<sup>+</sup> cells were obtained at the end of the process (see page 46, line 6 of the specification). For claim 8, Applicants note the specification at least at page 5, lines 6-10. Further, support for claim 9 is found at page 5, lines 11-13.

***Issues under 35 U.S.C. § 102(b) and § 103(a)***

Claim 5 stands rejected under 35 U.S.C. § 102(b) as being anticipated by or, in the alternative under 35 U.S.C. § 103(a) as being unpatentable over *Shimizu et al.* (*Blood*, Vol. 10, pp. 3688-3692 (1996)) (see pages 2-4 of the Office Action).

Also, claims 1-4 and 6 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Zanjani et al.* (*International J. Hematol.*, Vol. 63, pp. 179-192 (2001)) in view of *Li et al.* (*Blood*, Vol. 98, pp. 335-342 (1996)), *Sone et al.* (*Circulation*, Vol. 107, pp. 2085-2088 (2003)) and *Hamaguchi et al.* (*Blood*, Vol. 93, pp. 1549-1556 (1999)) (see pages 4-6 of the Office Action).

Applicants respectfully submit that these rejections have been adequately traversed in the previously filed July 24<sup>th</sup> Amendment. Applicants also request consideration of the supplemental remarks below.

In the July 24<sup>th</sup> Amendment, Applicants submitted that the Examiner's assertion that the present invention in using embryonic stem cells is obvious over the cited combination of references using hematopoietic stem cells is improper. Applicants also submitted that there have been many attempts to do what the Examiner is asserting, yet it is understood in the art that it is not a matter of combining various ingredients together and differentiation simply occurs. Further, Applicants attached a scientific reference by M. Kyba and G.Q. Daley (*Experimental Hematology*, Vol. 31 (11), pp. 994-1006 (2003)) with the last submitted Amendment. The *Experimental Hematology* (2003) article describes the difficulty in preparing adult hematopoietic chimeras from embryonic stem cells (differentiation of hematopoietic stem cells).

Applicants herein attach a Declaration pursuant to 37 C.F.R. § 1.132 by co-inventor Dr. Yutaka Hanazono. The attached Rule 132 Declaration is consistent with Applicants' arguments as set forth in the July 24<sup>th</sup> Amendment. In particular, the Rule 132 Declaration explains that many attempts to generate adult hematopoietic chimeras have failed. Further, Applicants submit that the present invention is the first to achieve a preparation of monkey/sheep hematopoietic chimeras using adult sheep from ES cells of primates, which was considered to be very difficult to achieve at the time the present application was filed.

In view of these supplemental remarks and the attached Rule 132 Declaration, reconsideration and withdrawal of these rejections are respectfully requested.

Applicants also request favorable consideration of new claims 7-9, as the cited combinations of references also fail to disclose or teach these claims.

**Conclusion**

In view of the above amendments, Applicants believe the pending application is in condition for allowance.

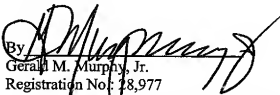
Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Eugene T. Perez (Reg. No. 48,501) at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§1.16 or 1.147; particularly, extension of time fees.

**AUG - 7 2008**

Dated: \_\_\_\_\_

Respectfully submitted,

By:   
Gerald M. Murphy, Jr.  
Registration No.: 28,977  
BIRCH, STEWART, KOLASCH & BIRCH, LLP  
8110 Gatehouse Road, Suite 100 East  
P.O. Box 747  
Falls Church, Virginia 22040-0747  
(703) 205-8000  
Attorney for Applicant

Attachment: Declaration Under 37 C.F.R. 1.132 (5 pages)